

### **REMARKS**

The amendment to claims 1, 8 and 18 is supported by canceled original claims 4, 5, 9 and 16 as well as by disclosure at claims 4 and 5 and page 6, line 25 to page 7, line 8. Applicants submit that the amendment does not add any new matter to the disclosure.

Applicants acknowledge the renumbering of the claims pointed out in the office action.

The invention centers on improved resist compositions and methods which are especially useful for patterning metals such as chromium, commonly used in mask-making. The compositions and methods of the invention alleviate problems with footing and coving associated with the prior art. In particular, the invention involves the use of a resist composition comprising a combination of (i) room temperature solid base selected from the group consisting of aromatic amines and imidazoles, and (ii) a liquid low vapor pressure base selected from the group consisting of triethanolamine, 1-naphthylamine, 2-naphthylamine, diphenylamine, acetanilide, 3,6,9-triazaundecamethylenediamine, 4,4'-propane-1,3-diylbismorpholine, and 1,8-azabicycloundecene. The examples in the present application show that the combination of bases yields an unexpected improvement in performance compared to using any of the bases individually.

Fujimori (US Pub. Appl. 2003/0186161 A1) discloses a photoresist composition where a wide range of base additives may be employed. While Fujimori discloses that combination of base additives can be used, Fujimori does not disclose or suggest any specific combinations of base additives, nor does Fujimori give any guidance regarding selection of such combinations. Further, Fujimori does not disclose or suggest any performance benefit associated with use of a combination of base additives. Applicants submit that the comparison

results of the examples documented in the present application demonstrate that use of the presently claimed combination of room temperature solid base and liquid low vapor pressure base provides an unexpected result of reduced footing. Applicants submit that such results demonstrate that the claimed composition and methods requiring use of such a combination of base additives is not obvious from Fujimori.

Koguchi et al. (US Pat. 4814244) is cited to show the use of resist compositions in patterning processes. Koguchi et al. does not disclose or suggest any specific combinations of base additives, nor does Koguchi et al. give any guidance regarding selection of such combinations. Further, Koguchi et al. does not disclose or suggest any performance benefit associated with use of a combination of base additives. Thus, applicants submit that the combination of Fujimori with Koguchi et al. would not make obvious the presently claimed composition and methods requiring use of the specified combinations of base additives.

Momma et al. (US Pat. 5731131) is cited to show the use of chemical vapor deposition in patterning processes. Momma et al. does not disclose or suggest any specific combinations of base additives, nor does Momma et al. give any guidance regarding selection of such combinations. Further, Momma et al. does not disclose or suggest any performance benefit associated with use of a combination of base additives. Thus, applicants submit that the combination of Fujimori with Momma et al. would not make obvious the presently claimed composition and methods requiring use of the specified combinations of base additives.

For the above reasons, applicants submit that the application is now in condition for allowance. Such allowance is earnestly and respectfully solicited.

Respectfully submitted,  
Wayne M. Moreau et al.

/Steven Capella/  
By \_\_\_\_\_  
Steven Capella, Attorney  
Reg. No. 33,086  
Telephone: 845-894-3669